

There is a need to enhance the bleaching effect achieved when bleaching mechanical and chemithermomechanical pulp with a reductive bleaching agent. This can be achieved with the present invention, which relates to a method for manufacturing bleached mechanical and chemithermomechanical pulp including that lignocellulose material, preferably wood in chip form, is caused to pass through at least one preheater or through a chemical treatment system, a steam separator and a refiner where the lignocellulose material is converted into a pulp suspension which, after steam separation, is passed at least to a storage vessel (tendency chest) and to a screening department, from which the major part of the pulp suspension is taken out as a substantially finished product to be taken out and passed to further treatment steps. The reductive bleaching agent is added to the advancing pulp suspension without the use of a bleaching tower or the like. The method is characterized by adding the bleaching agent at a location downstream of the refiner and upstream of the screening department, and by bleaching the pulp under the given drastic condition from the aspect of temperature and the given minimized oxygen access at said location and immediately downstream of said location.